

Amendment to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application:

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Claim 1 (currently amended): A method for communicating between computer bus modules comprising the steps of:

converting native bus signals from a first computer module to a first point-to-point interface;

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conveying the bus signals using the first point-to-point interface to a bus emulator when the bus emulator is available;

conveying the bus signals from the bus emulator using a second point-to-point interface to a second computer module; and

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converting the bus signals received at the second computer to a native form.

Claim 2 (original): The method of Claim 1 wherein the step of converting native bus signals from a first computer module to a first point-to-point interface comprises the steps of:

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monitoring the native bus signals in order to identify the beginning of a data transfer cycle; and

accepting data and address signals from the native bus and serializing these together with an indication of the type of transfer identified.

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Claim 3 (original): The method of Claim 1 wherein the step of conveying bus signals from the bus emulator to a second computer module comprises the steps of:

receiving the bus signals from the first point-to-point interface in the bus emulator;

translating the first point-to-point interface received in the bus emulator to a bus structure internal to the bus emulator;

conveying the bus signals received in the bus emulator by way of the first point-to-point interface onto said bus structure; and

5 translating the bus signals carried on said bus structure to a second point-to-point interface.

Claim 4 (original): The method of Claim 3 wherein the step of conveying the bus signals received in the bus emulator by way of the first point-to-point interface

10 onto said bus structure comprises the steps of:

granting said bus structure to the first point-to-point interface if said bus structure is available; and

propagating the bus signals translated from the first point-to-point interface onto the bus structure if the bus structure is granted to said first point-to-point interface.

Claim 5 (currently amended): A computer system comprising:

plurality of point-to-point interface units comprising a computer module interface and a point-to-point interface;

20 plurality of computer modules connected to the computer module interface of the plurality of point-to-point interface units; and

bus emulator connected to the point-to-point interface of the plurality of point-to-point interface units, wherein the bus emulator is capable of supporting only one transfer at a time.

25 Claim 6 (original): The computer system of Claim 5 wherein the plurality of point-to-point interface units comprise parallel-to-serial conversion units that operate upon detecting the beginning of a data transfer cycle presented to the computer module interface and wherein the parallel-to-serial conversion units accept a

data field and an address field and a cycle-type indicator from the computer module interface.

5 Claim 7 (original): The computer system of Claim 5 wherein the plurality of point-to-point interface units comprise high-current parallel drivers capable of propagating data, address and data transfer cycle requests.

10 Claim 8 (original): The computer system of Claim 5 wherein the bus emulator comprises:
plurality of point-to-point interfaces interconnected by an internal bus.

15 Claim 9 (original): The computer system of Claim 8 further comprising an arbiter for granting access to the internal bus to one of the plurality of point-to-point interfaces.

Claim 10 (original): The computer system of Claim 8 further comprising a cascade port that connects to the internal bus and can be used to extend the length of the internal bus.

20 Claim 11 (currently amended): A computer module comprising a point-to-point interface capable of interacting with a bus emulator that is capable of supporting one bus transfer at a time.

25 Claim 12 (original): The computer module of Claim 11 wherein the point-to-point interface comprises:

parallel-to-serial conversion unit that operate upon detecting the beginning of a data transfer cycle presented to the computer module interface and wherein the parallel-to-serial conversion units accept a data field and an address field and a cycle-type indicator from the computer module

interface and delivers a serial output comprising a data transfer cycle to the point-to-point interface.

5 Claim 13 (original): The computer module of Claim 11 wherein the point-to-point interface comprises high-current parallel drivers capable of propagating data, address and data transfer cycle requests.

10 Claim 14 (currently amended): A point-to-point interface unit comprising a computer module interface and a point-to-point interface, wherein the point-to-point interface is capable of interacting with a bus emulator that is capable of supporting one bus transfer at a time.

15 Claim 15 (original): The point-to-point interface unit of Claim 14 further comprising parallel-to-serial conversion unit that operate upon detecting the beginning of a data transfer cycle presented to the computer module interface and wherein the parallel-to-serial conversion units accept a data field and an address field and a cycle-type indicator from the computer module interface and delivers a serial output comprising a data transfer cycle to the point-to-point interface.

20 Claim 16 (original): The computer system of Claim 14 wherein the plurality of point-to-point interface units comprise high-current parallel drivers capable of propagating data, address and data transfer cycle requests.

25 Claim 17 (currently amended): A bus emulator comprising:
internal bus capable of supporting one bus transfer at a time; and
plurality of point-to-point interfaces interconnected by the internal bus.

30 Claim 18 (original): The bus emulator of Claim 17 an arbiter for granting access to the internal bus to one of the plurality of point-to-point interfaces.

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Claim 19 (original): The bus emulator of Claim 17 further comprising a cascade port connected to the internal bus and can be used to extend the length of the internal bus.

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